

CORRESPONDENCE

Letter to the Editors: From Innumeracy to Insight: The Uncertainty of Help versus Harm in Treatment of Asymptomatic Aortic Aneurysms

Dear editors,

Einstein said 'Things should be made as simple as possible, but not any simpler to fall into the trap of oversimplification of complex problems'. The commentary on our article by Björck and Wanhainen gives the impression that we fell into the trap as we did not include some key findings from the literature.^{1,2}

We appreciate all the information the authors extracted from the literature. Nevertheless we were unable to extract transparent data from their commentary on the increase in longevity in case of early preventive surgery. The only 'positive' randomized trial the authors cited is the report of the long term results of the UK small aneurysm trial with a number needed to treat of 20 in favour of the immediate surgery group.³ The authors of this trial concluded that a portion of the increase in survival had to be attributed to an improved life-style in the patients who underwent early surgery.

Björck and Wanhainen state that our assumptions are so biased that these only serve to prove our hypothesis that surgical treatment is unlikely to have a major effect on survival. We like to stress that our scenarios were all formulated under the assumption that aneurysm surgery increases survival, partly extenuating the criticism that we did not include several important variables from the literature. We agree that decision analysis, including Markov modelling, might be helpful.

The use of natural frequency trees is a comparatively easy way of communicating evidence. Such

trees clearly show that aneurysm surgery is associated with harmful effects that also affect patients who do not have any benefit from surgery in terms of increased survival. In addition the trees nicely illustrate the large number of patients unnecessarily treated. As the focus in the commentary is mainly on the prevention of the risk of rupture this crucial information is completely ignored in balancing the pros and cons of aneurysm surgery.

We feel a considerable gap between our way of thinking, as is manifested in our paper, and the commentary by Björck and Wanhainen. It is not our aim to spread discord, but to create critical and innovative thinking. Hopefully our article and the commentary will stimulate further discussion.

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References

- 1 BJÖRCK M, WANHAINE A. Invited Commentary for "From innumeracy to insight: the uncertainty of help versus harm in treatment of asymptomatic aortic aneurysms" by Legemate and Bossuyt. *Eur J Vasc Endovasc Surg* 2006;**32**:624–626.
- 2 LEGEMATE DA, BOSSUYT PM. From innumeracy to insight: the uncertainty of help versus harm in treatment of asymptomatic aortic aneurysms. *Eur J Vasc Endovasc Surg* 2006;**32**:620–623.
- 3 The UK Small Aneurysm Trial Participants. Long-term outcomes of immediate repair compared with surveillance of small abdominal aortic aneurysms. *N Eng J Med* 2002;**346**:1445–1452.

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